

69. An apparatus as defined in claim 60, wherein said prismatic surface comprises a ruled prismatic surface.

70. An apparatus as defined in claim 60, wherein said tuning device reflects light energy being emitted by said light energy sources.

71. An apparatus as defined in claim 60, wherein said tuning device refracts light energy being emitted by said light energy sources.

72. An apparatus as defined in claim 60, wherein said prismatic surface is made from a highly reflective material having a reflectivity of at least 0.9 at a wavelength being emitted by said light energy sources.

73. An apparatus as defined in claim 60, wherein said prismatic surface comprises a diffuse surface for reflecting and scattering light energy.

REMARKS

Favorable consideration and allowance of the present application in view of the foregoing amendments and following remarks are respectfully requested.

In the previous Office Action, various claims were rejected under 35 U.S.C. § 103(a) as being unpatentable under Vosen. However, Vosen is not available as prior art under § 102(e)/103 . In particular, recently amended § 103(c) provides that subject matter that qualified as prior art under §102 (e, f, g) shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, subject to an obligation of assignment to the same person. This addition to § 103(c) applies to any original application filed on or after Nov. 29, 1999, including continued prosecution applications filed under 37 C.F.R. § 1.53(d).

In the previous Office Action, various claims were also rejected in view of Robinson, et al. and Moslehi, et al. The claims as currently pending, however, are believed to patentably define over these two references.

In particular, none of the cited references, taken singularly or in proper combination, disclosed the claimed invention. For example, the claims of the present invention are generally directed to an apparatus for heating semiconductor wafers that incorporates tuning devices allowing greater control of the heating of the wafer. More specifically, the claims of the present invention are directed to an apparatus incorporating tuning devices that either 1) comprise a light source mounted in conjunction with a light refracting device such as a lens, 2) comprise a laser diode light energy source, 3) comprise a prismatic surface, or 4) comprise a tuning light energy source that is different from the plurality of the primary light energy sources..

In contrast to the present invention, Moslehi et al. is generally directed to a multi-zone illuminator module for directing optical energy into a semiconductor wafer. Note that Moslehi et al. does not disclose the use of tuning devices for more uniform heating of semiconductor elements. More specifically, Moslehi et al. does not disclose the use of lenses or a prismatic surface for more uniform heating of semiconductor wafers. Moslehi et al. also fails to disclose the use of tuning devices comprised of different light energy sources than those that comprise the main light energy array. Moreover, Moslehi et al. does not disclose tuning devices comprised of laser diodes. As such, Applicant respectfully submits that the claims of the present invention are not anticipated by, nor obvious over Moslehi et al..

Robinson et al., on the other hand, is generally directed to a heating system for substrates that uses elongated heating elements in conjunction with heat concentrator means mounted on the lower wall of the heating apparatus. The heat concentrator means of Robinson et al., unlike

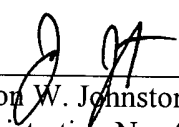
the tuning devices of the present invention, are merely reflectors. As such, Applicant respectfully submits that the claims of the present invention, are also not anticipated by, nor obvious over Robinson et al.

In summary, Applicant respectfully submits that the claims as presently amended are patentably distinct over prior art of record and meet all of the requirements of 35 U.S.C. § 112. It is believed that the present application is in complete condition for allowance and favorable action, therefore, is respectfully requested. Examiner Nguyen is invited and encouraged to telephone the undersigned, however, should any issues remain after consideration of this response.

Please charge any additional fees to Deposit Account Number 04-1403.

Respectfully submitted,

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